

CENTRAL PNEUMATIC®

Abrasive Blaster With Vacuum

Model 95502

ASSEMBLY AND OPERATING INSTRUCTIONS



Due to continuing improvements, actual product may differ slightly from the product described herein.



3491 Mission Oaks Blvd., Camarillo, CA 93011

Visit our Web site at <http://www.harborfreight.com>

To prevent serious injury, read and understand all warnings and instructions before use.

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For technical questions and replacement parts, please call 1-800-444-3353

Specifications

Abrasive Media Capacity	up to 20 Gallons
Air Consumption	6 to 22.5 CFM @ 115 PSI
Media Hose Dimensions	1/2" ID x 9'8" Long
Electrical Power Required	120 VAC 60 Hz 13.2 Amps
Blast Gun Type	Trigger Operated
Overall Height	40" High

Abrasive Media Type	Dry Only, such as Glass Beads, Metal Shot, Aluminum Oxide, Walnut Shells
Air Inlet Size	1/4" x 18 NPT
Filter System	Separates abraded material and used abrasive material
Power Cord	14AWGX3C, Three prong grounded, 13'8-3/4"L
Blast Gun Dimensions	5-3/16"L x 3-9/16"W x 7/8"H
Net Weight	63.35 LBS.

This Abrasive Blaster has a filter system that removes most debris from the abrasive media after each use. This reduces abrasive media consumption by up to 92%. Reduces need for breathing apparatus by collecting dust in a removable container. Helps keep work area clean and free from debris.

Save This Manual

You will need the manual for the safety warnings and precautions, assembly instructions, operating and maintenance procedures, parts list and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep the manual and invoice in a safe and dry place for future reference.

Safety Warnings and Precautions

WARNING: When using tool, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment.

Read all instructions before using this tool!

1. **Keep work area clean.** Cluttered areas invite injuries.
2. **Observe work area conditions.** Do not use machines or power tools in damp or wet locations. Don't expose to rain. Keep work area well lit.
3. **Keep children away.** Children must never be allowed in the work area. Do not let them handle machines, tools, or extension cords.
4. **Store idle equipment.** When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
5. **Use the right tool for the job.** Do not attempt to force a small tool or attachment to do the work of a larger industrial tool. This tool will do the job better and more safely at the rate for which it was intended. Do not modify this tool and do not use this tool for a purpose for which it was not intended.

6. **Dress properly.** Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically non-conductive clothes and non-skid footwear are recommended when working. Wear restrictive hair covering to contain long hair.
7. **Use eye, ear and hand protection.** Always wear ANSI approved impact safety goggles when operating this tool. Wear a full face shield if you are producing metal filings or wood chips. Wear an ANSI approved dust mask or respirator when working around metal, wood, and chemical dusts and mists. Wear ANSI approved ear protection due to high pressure air in use. Wear heavy work gloves to protect hands from abrasive injury.
8. **Do not overreach.** Keep proper footing and balance at all times. Do not reach over or across running machines.
9. **Maintain tools with care.** Keep tools maintained and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and, if damaged, have them repaired by a qualified technician. The handles must be kept clean, dry, and free from oil and grease at all times.
10. **Disconnect air power.** Disconnect air power source from tool when not in use.
11. **Remove adjusting keys and wrenches.** Check that keys and adjusting wrenches are removed from the tool or machine work surface before attaching air pressure hose.
12. **Avoid unintentional starting.** Be sure the Blast Gun Trigger is in the Off position when not in use and before attaching air supply. Do not carry any tool with your finger on the trigger, whether or not it is connected to a power source.
13. **Stay alert.** Watch what you are doing, use common sense. Do not operate any tool when you are tired.
14. **Take caution as some woods contain preservatives such as copper chromium arsenate (CCA) which can be toxic.** When blasting these materials extra care should be taken to avoid inhalation and minimize skin contact.
15. **Check for damaged parts.** Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts; any broken parts or mounting fixtures; and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician. Do not use the tool if any switch does not turn On and Off properly.

16. **Guard against electric shock.** Prevent body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerator enclosures.
17. **Replacement parts and accessories.** When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with this tool. Approved accessories are available from Harbor Freight Tools.
18. **Do not operate tool if under the influence of alcohol or drugs.** Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.
19. **Maintenance.** For your safety, service and maintenance should be performed regularly by a qualified technician.
20. **Use compressed air only as a power source.** Use clean, dry, regulated compressed air only as a power source. Do not exceed 115 PSI. Never use Oxygen, flammable gasses or any bottled gas as a power source for this tool.
21. **Never point the Blast Gun toward yourself or any person or animal.** Severe injury may result from the abrasive spray.
22. **Stand back from the item being blasted.** Deflected spray from the abrasive blaster may cause injury.
23. **Prevent overflow or deflected abrasive spray from damaging nearby items.** Keep workplace cleared of items which may be damaged by this tool.
24. **All industrial applications of this tool must meet OSHA requirements.**
25. **Whenever possible, test the abrasive blaster on a sample or inconspicuous part of the workpiece to prevent damage during operation.**

WARNING! This product, when used for abrasive blasting and similar applications, produces chemicals known to the State of California to cause cancer and birth defects (or other reproductive harm). (California Health & Safety Code 25249.5, et seq.)

WARNING Silicosis hazard.

Read, Understand and Follow the warnings and instructions given on page 5 to reduce silicosis hazard.



WARNING! Abrasive blasting with media containing crystalline silica **can cause serious or fatal respiratory disease**. Exposure to crystalline silica may cause silicosis (a serious lung disease), cancer, and death. Exposure to aluminum oxide (a dust generated from material removing processes) can result in eye, skin, and breathing irritation. Always use a NIOSH-approved respirator, safety impact eye glasses, and a full face shield. Avoid skin exposure. Proper ventilation in the work area is required.

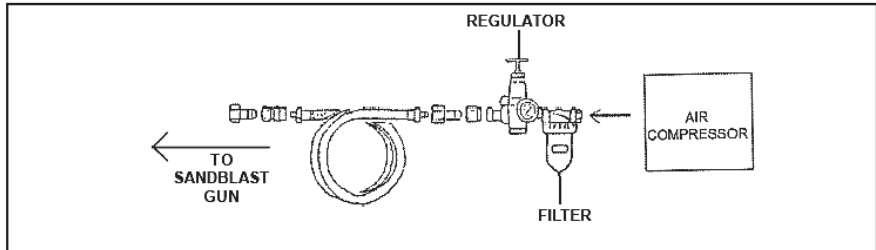
Read and understand the ten recommended measures below to reduce crystalline silica exposure in the workplace and prevent silicosis and silicosis related injuries and deaths.

1. Prohibit silica sand (or other substances containing more than 1% crystalline silica) as an abrasive blasting material and substitute less hazardous materials.
2. Conduct air monitoring to measure worker exposures.
3. Use containment methods such as blast-cleaning machines and cabinets to control the hazard and protect adjacent workers from exposure.
4. Practice good personal hygiene to avoid unnecessary exposure to silica dust.
5. Wear washable or disposable protective clothes at the work site. Shower, and change into clean clothes before leaving the worksite to prevent contamination of cars, homes, and other work areas.
6. Use respiratory protection when source controls cannot keep silica exposures below the recommended levels.
7. Provide periodic medical examinations for all workers who may be exposed to crystalline silica.
8. Post signs to warn workers about the hazard and to inform them about required protective equipment.
9. Provide workers with training that includes information about health effects, work practices, and protective equipment for crystalline silica.
10. Report all cases of silicosis to State health departments and to OSHA or the Mine Safety and Health Administration (MSHA).

WARNING: The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Assembly of Air Pressure Supply

1. This sandblaster will consume up to 22.5 CFM of air supply at an operating pressure of up to 115 PSI. This will require a substantial air compressor and tank assembly. If you do not have an adequate air compressor, you may purchase one from Harbor Freight Tools.
2. For best service, you should use an air pressure regulator and in-line filter (both not included) as shown in the diagram below.



WARNING: Do not use any power supply other than clean dry compressed air.

Assembly of Tool

Assemble Wheels to Abrasive Tank Base.

1. Slide both Wheels (35) onto the Axle (33), one on each side of the Abrasive Tank (22) base.
2. Place a Retaining Ring (36) over the Axle on each side.
3. Insert a Cotter Pin (34) through the hole in the Axle on the other side of the Wheel and fix in place.
4. Press the Wheel Caps (37) in place to cover the ends of the Axles.

Install the Handle.

1. Place the Handle (20) into the openings on the upper side of the Abrasive Tank (22).
2. Fix in place using two Set Screws (21). Tighten securely.

Install the Casters.

1. Insert the stem of each Caster (39) into the openings on the bottom of the Abrasive Tank (22) base.
2. Fix in place using two of the Set Screws (21). Tighten securely.

Assembly (Continued)

Assemble the Vacuum Hose.

1. Twist and press the Couplers (24) into the side of the Abrasive Tank (22) and the top of the Blast Head (45). Tighten securely.
2. Twist and press the ends of the Vacuum Hose (23) into the Couplers.

Assemble the Abrasive Hose Assembly.

1. Attach one end of the Abrasive Hose (30) to the Coupler (40) at the Abrasive Outlet Manifold (38) on the bottom of the Abrasive Tank (22). Use the Hose Clamp (31) and Hose Bushing (32) to secure this attachment and tighten securely.
2. Using the other Hose Clamp (31), attach the other end of the Abrasive Hose (30) to the Coupler (40) in the handle of the Blast Gun Body (41). Tighten securely.

Attach the Air Supply Hose.

NOTE: You will need a 1/2" diameter air supply hose or other hose which will connect to a 1/4" x 18 NPT fitting.

1. Attach the end of your air supply hose (not included) to the Coupler (40) on the underside of the Blast Gun (41). Tighten the hose in place using a hose clamp (not included). See **Assembly Diagram** on page 13.

Insert the Vacuum Unit.

1. Place the Dust Container (19) into the top of the Abrasive Tank (22).
2. Place the Vacuum Assembly (1 - 18) into the Dust Container at the top of the Abrasive Tank.
3. Engage and tighten the clip on the side of the Abrasive Tank to secure the Vacuum Assembly in place. See photo at right.

Vacuum Assembly Clip



Operation

Fill the Abrasive Tank with abrasive media.

1. Unsnap the clip holding the Vacuum Assembly in place and set the Vacuum Assembly aside.
2. Pour in up to 35 gallons of dry abrasive media. The choice of media will depend on your work material and purpose. See recommendations on page 9.
3. Replace the Vacuum Assembly and clip into place.

Start the Vacuum Assembly.

1. Plug the Power Cord into an appropriate power source, and turn the Vacuum on by moving the Power Switch (18) to the ON position.
2. Check at the Blast Head (45) to be sure that the vacuum is working properly.



Power Switch (18)

Turn on the air pressure.

1. Start the air compressor (not included) and check the regulator for proper pressure (no more than 115 PSI).

Your Abrasive Blaster is now ready to operate.

Put on all recommended safety equipment and check to be sure that it is safe to begin work.

1. Place Brush Head (47) against surface to be blasted.
2. Squeeze trigger of Blast Gun assembly to begin operation. It will take a few seconds for abrasive media to begin to flow and reach the gun.
3. As work proceeds, the vacuum will capture abraded material and abrasive media and return them to the Abrasive Tank (22). The Filter Assembly (15) and Debris Filter (25) will separate abraded material and deposit it in the Dust Container (19). Reusable abrasive media will be returned to the Abrasive Tank (22).
4. When work is completed, release the trigger to stop blasting. Turn off the vacuum assembly, release air pressure, and turn off the air pressure supply.
5. Clean up all materials and store your tools safely and securely.

Tips for Better Operation of your Abrasive Blaster

Abrasive Selection:

1. The type of media chosen will greatly influence the amount of time needed to clean a particular surface area.
2. Abrasive blasting media include glass or metal beads, aluminum oxide or walnut shells.
3. If you decide to reuse media, remember, it does wear out. The sharp edges become rounder and are less effective. At that point you should replace the tank of media you are using.

Here is a representative list of media options:

Silicon Carbide is the hardest blasting media available. Silicon carbide has a very fast cutting speed and can be recycled and re-used many more times than most media other than steel shot. The hardness of silicon carbide delivers a much shorter blast time compared to other blast media. However, Silicone Carbide is not recommended due to the danger of Silicosis disease.

Aluminum Oxide can be re-used many times for grit blasting. It is a sharp, long-lasting abrasive sandblasting cutting media which is harder than most common dry abrasive blast media. It will cut even the hardest metals and surfaces. It is available in a variety of grit sizes. Aluminum Oxide has limited re-use life because the individual grains can shatter during blasting.

Steel Grit contains angular carbon steel which is effective for fast removal of paint, rust and scale from metals. Steel Grit is softer than Aluminum Oxide and is less likely to fracture during blasting. It leaves an etched surface which is excellent for adhesion of paints and coatings.

Crushed Glass Grit is a silica-free consumable abrasive. It normally cannot be used more than once because it powders during blasting. Crushed Glass Grit produces a whiter, cleaner finish than mineral or steel abrasives.

Bead Blasting produces a distinctive pebbled surface on metals. Bead blasted finishes are softer and brighter than finishes produced by sharp edged abrasives. Glass beads and steel shot are frequently used bead blasting media.

Glass Beads are silica-free and can be used for shot blasting, peening, honing, cleaning and light deburring. Glass Beads can usually be recycled up to 30 times.

Steel Shot can be used repeatedly and produce very little media dust during the blasting process. Steel shot will produce a clean, smooth and polished finish. Steel shot blasting will also work-harden metals, creating a harder surface layer.

Plastic Abrasives are ideal for sheet metal applications such as auto restoration. They can strip paint quickly without damaging or warping the substrate.

Walnut Shells are an organic media which has an angular shape. They are effective for paint stripping of sheet metal and plastic, and are also useful for polishing harder metals such as steel alloys and titanium.

Corn Cob is an even softer biodegradable media which will not etch or warp the surface being blasted. It is ideal for wood and thin metals and plastics. Corn cob is also a useful polishing media.

Pumice is the softest of all the blasting media yet still offers excellent stripping properties. Excellent for blasting surfaces such as soft wood to remove paint and coatings with no impact on the substrate. Pumice is available in various grits and can be used for polishing.

Loading Media Into The Tank:

1. **WARNING!** Never service the Abrasive Blaster or disassemble with the air hose attached. Always release any built-up air even after disconnecting the hose.
2. Make sure the media used is dry to avoid clogging the Abrasive Hose (30) or Blast Gun Assembly.
3. Pour the media into the Abrasive Tank (22), making sure to pour enough into the Tank to do the job at hand. **NOTE:** If this is a large job, fill the Tank only 3/4 full and reload as needed to finish the job.
4. **IMPORTANT TIP:** If the humidity is 90 to 100%, it is recommended to reduce the amount of media and load more frequently. This will reduce the possibility of clogging the bottom of the Tank, the Abrasive Hose (30), and Blast Gun.

Operating The Abrasive Blaster:

1. If possible, place the workpiece inside a sandblast cabinet. Otherwise, isolate the workpiece to make sure no damage can occur to nearby walls, tools, personal property, etc. **CAUTION:** Make sure spectators are completely clear of the work area before beginning work.
2. Connect the air compressor's hose to the Coupler (40) on the Blast Gun Then turn on the air compressor, and set its regulator to **115 PSI**. Do not exceed 115 PSI.
3. Grip the Blast Gun firmly with both hands.
4. Keep the Brush Head (47) in contact with the work surface to effectively return material through the vacuum system.
5. Squeeze the Trigger of the Blast Gun to release the media. **NOTE:** The flow rate of the media may be irregular when the Blast Gun is first started. Provided the media is dry, the flow rate will become normal in approximately one minute.

6. Adjust pressure on the Trigger of the Blast Gun to increase or decrease the media flow rate.
7. Adjust the air compressor's regulator to regulate the total air flow and pressure at the Blast Gun (no more than 115 PSI).
8. Move the Blast Gun in a circular or right to left motion until you have achieved the desired appearance (finish) on the workpiece.
9. Periodically, check the water filter on the air compressor system for excessive water buildup. If necessary, discontinue work while the filter is drained.
10. When the abrasive blasting job is completed, release pressure on the Trigger of the Blast Gun. Turn off the air compressor. Then squeeze the Trigger of the Blast Gun again to release any remaining compressed air in the system.
11. Unplug the Power Cord.
12. Empty the Abrasive Tank (22) of any remaining media. Remove and clean the Debris Filter (25) from the bottom of the Abrasive Tank (22).

INSPECTION, MAINTENANCE, AND CLEANING

1. **WARNING!** Prior to performing any inspection, maintenance, or cleaning of the Abrasive Blaster, turn off the air compressor. Squeeze the Trigger of the Blast Gun to release any remaining compressed air in the system. Then, disconnect the compressor's air hose from the Blast Gun. Unplug the Power Cord of the Vacuum Assembly.
2. Before each use, inspect the general condition of the Abrasive Blaster and its accessories. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, damaged air hoses, and any other condition that may affect safe operation. If abnormal noise or vibration occurs, have the problem corrected before further use. **Do not use damaged equipment.**
3. Before, during, and after use: Periodically, check the water filter in the air compressor system for excessive water buildup. If necessary, discontinue working and drain the water filter.
4. Periodically check the Filter (15). Replace when dirty.
5. To clean the exterior of the Abrasive Blaster, wipe with a clean, damp cloth using a mild detergent or mild solvent.
6. When storing, always store the Abrasive Blaster in a clean, dry, safe location out of reach of children and other unauthorized people.
7. **CAUTION!** All maintenance, service, and repairs not mentioned in this manual must only be performed by a qualified service technician.

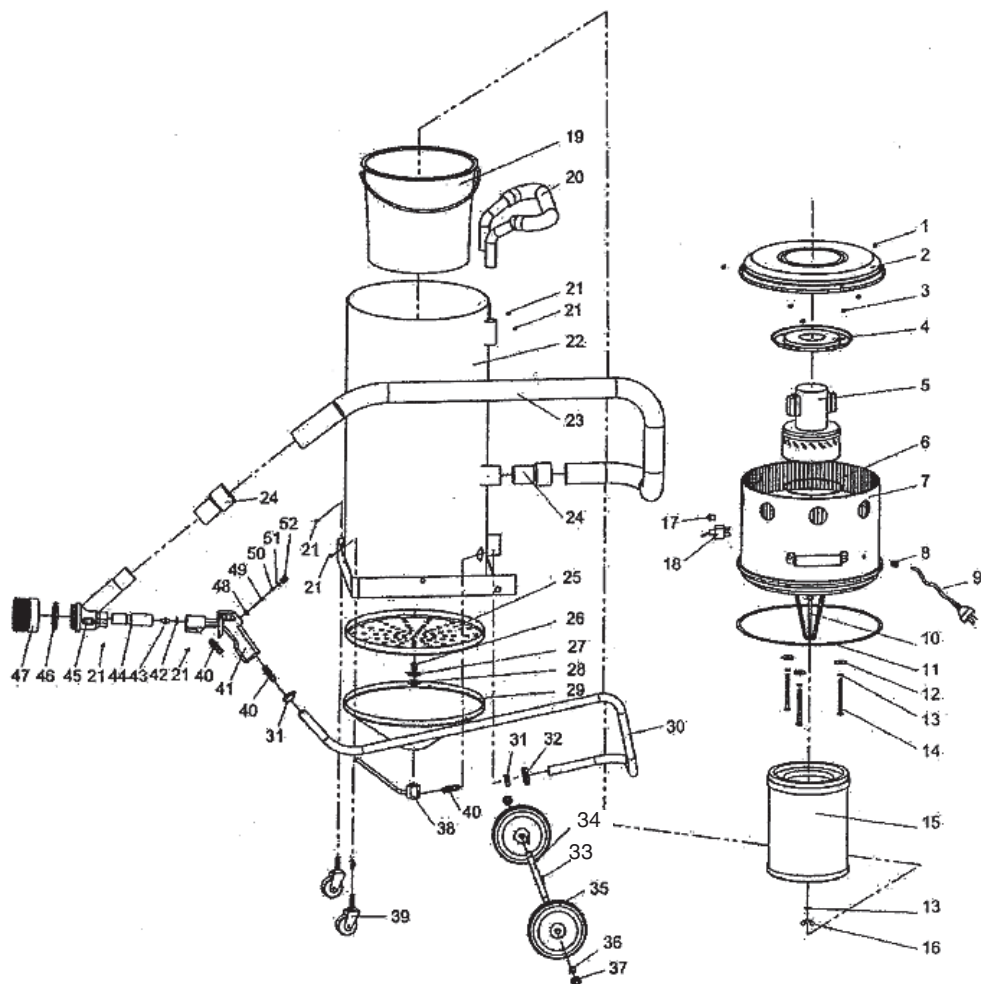
Parts List

Part #	Description	QTY.
1	Screw	3
2	Vacuum Cover	1
3	Nut	3
4	Motor Clamp Plate	1
5	Vacuum Motor	1
6	Rubber Ring	1
7	Vacuum Housing Assembly	1
8	Cord Clamp	1
9	Power Cord	1
10	Carriage Bolt	1
11	Rubber Ring	1
12	Rubber Seal	3
13	Washer	4
14	Bolt	3
15	Filter Assembly	1
16	Wing Nut	1
17	Power Indicator Lamp	1
18	Power Switch	1
19	Dust Container	1
20	Handle	1
21	Set Screw	6
22	Abrasive Tank	1
23	Vacuum Hose	1
24	Coupler	2
25	Debris Filter	1
26	Screw Plug	1

Part #	Description	QTY.
27	Spacer	1
28	Rubber Seal	1
29	Funnel	1
30	Abrasive Hose	1
31	Hose Clamp	2
32	Hose Bushing	1
33	Axle	1
34	Cotter Pin	2
35	Wheel	2
36	Retaining Ring	2
37	Wheel Cap	2
38	Abrasive Outlet Manifold	1
39	Swivel Castor	2
40	Coupler	3
41	Blast Gun Body	1
42	Rubber Seal	1
43	Ceramic Blast Core	1
44	Coupler	1
45	Blast Head	1
46	Rubber Ring	1
47	Brush Head	1
48	Seal	1
49	Valve Needle	1
50	Spring	1
51	Seal	1
52	Screw Plug	1

NOTE: Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.

Assembly Diagram



PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER NOR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

WARRANTY

CENTRAL PNEUMATIC®

LIMITED 1 YEAR WARRANTY

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of one year from the date of purchase. This warranty does not apply to damage due directly or indirectly to misuse, abuse, negligence or accidents; repairs or alterations outside our facilities; or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. **THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.**

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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